

EXHIBIT 5

**UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF TEXAS
WACO DIVISION**

WSOU INVESTMENTS, LLC D/B/A
BRAZOS LICENSING AND DEVELOPMENT,

Plaintiff,

v.

HEWLETT PACKARD ENTERPRISE COMPANY,

Defendant.

Nos. 6:20-cv-00725-ADA
6:20-cv-00726-ADA
6:20-cv-00727-ADA
6:20-cv-00728-ADA

JURY TRIAL DEMANDED

DECLARATION OF SCOTT NETTLES, PH.D.

I, Scott M. Nettles, hereby declare and state as follows:

I. Introduction

1. My name is Scott M. Nettles, and I reside at 536 Liberty Street, San Francisco, California 94114. I am submitting this declaration on behalf of WSOU Investments, LLC d/b/a Brazos Licensing and Development (“Brazos”) in the litigations identified on the foregoing page.

2. I understand that Brazos has accused Hewlett Packard Enterprise Company (“HPE”) of infringing certain claims in Brazos’s patents including U.S. Patent No. 7,519,056 (the “’056 patent”). I am over eighteen years of age and I would be competent to testify as to the matters set forth herein if I am called upon to do so. I am being compensated for my work in this litigation, including the drafting of this expert declaration, at my usual consulting rate of \$550 an hour. My compensation does not depend in any way on the opinions that I express in this declaration, any additional opinions I may submit, or on the outcome of this litigation.

3. I am a technical expert in the subject matter areas relevant to the asserted patents, including computer networking, network traffic management, communication protocols, information storage and transfer, user interfaces, information signal processing, and electronic device control. I am qualified to reach the opinions and conclusions stated in this declaration.

4. I have been asked to consider how one of ordinary skill in the art to which the ’056 patent is directed would have understood (at the time of invention) the term “dynamically determined” in claims 1, 18, and 21. This declaration summarizes my opinions regarding that meaning.

5. I understand that further expert discovery will occur at a later stage in this case, including the submission of expert reports on the infringement and validity of the asserted patents. I reserve my right to update my opinions in this declaration regarding the meaning of

the claims of the asserted patents through any further expert reports and/or testimony that I may provide in this case.

II. Background and Qualifications

6. I have attached a current copy of my curriculum vitae as Exhibit A. A list of the cases during at least the last five years in which I have signed a Protective Order, have testified as an expert either at a trial, hearing, or deposition, or have submitted statements/opinions is included as Exhibit A.

7. I attended Michigan State University from 1977 to 1981 as a Merit Scholar and an Alumni Distinguished Scholar and received a bachelor's degree in Chemistry. I later attended Carnegie Mellon University from 1988 to 1995, during which time I received both a master's degree (1992) and a Ph.D. (1996) in Computer Science. Most of my graduate work was focused on developing programming languages for distributed systems. My dissertation was entitled "Safe and Efficient Persistent Heaps" and focused on high performance automatic storage management for advanced distributed database systems.

8. Before earning my Ph.D., I worked for over four years in industry at Silicon Solutions, Inc. and Digital Equipment Corporation, developing computer aided design (CAD) software for the semiconductor and computer sectors. For example, I designed and implemented systems for VLSI mask generation and VLSI design rule checking. I also built the first graphical drawing editor for the X window system, Artemis, which included a sophisticated graphical user interface.

9. I have worked as a professor at three universities since 1995: the University of Pennsylvania, the University of Arizona, and the University of Texas at Austin. I was the recipient of a National Science Foundation CAREER award for "CAREER: Advancing Experimental Computer Science in Storage Management and Education" while I was an

Assistant Professor at the University of Pennsylvania. During this time, I also was part of the DARPA funded SwitchWare project, which was one of the pioneering groups in the area of Active Networking (“AN”). My group developed PLAN, the first domain-specific programming language for programmable packets, as well as PLANet, the first purely active inter-network.

10. I joined the faculty of the University of Texas at Austin (“UT”), in the Department of Electrical and Computer Engineering in 1999. In 2005, I was appointed Associate Professor with tenure. At UT, my graduate teaching focused on networking, including numerous advanced seminars on mobile and wireless networking. My undergraduate teaching included networking, operating systems, and one of UT’s required programming class, which focused on programming with abstractions, Java, and data structures.

11. At UT, I continued to develop AN technology and, in 2002, my Ph.D. student Mike Hicks won the ACM SIGPLAN dissertation award for our joint work on software updating. Along with my Ph.D. student Seong-kyu Song I focused my AN work on mobile and wireless networking. As a result, my research shifted away from AN to mobile and wireless networking in general, especially interactions between the network, the radios, and the physical world. My most recent research at UT involved the development of Hydra, which is a working prototype of an advanced software-implemented WiFi network funded primarily by NSF.

12. I retired from UT Austin in the Spring of 2013. I am currently self-employed. Much of my current work involves consultations with attorneys regarding questions of patent infringement and validity.

III. The Person of Ordinary Skill in The Art

13. I understand that a patent’s disclosure and claims are viewed and interpreted based on the knowledge and understanding of a person of ordinary skill in the relevant art at the time of the invention.

14. I understand that claims are construed from the perspective of one of ordinary skill in the art to which the patented subject matter pertains at the time of the invention. Furthermore, I understand that a determination of the level of ordinary skill in the art includes as relevant factors (1) the educational level of the inventor; (2) the type of problems encountered in the art; (3) the prior solutions to those problems; (4) the rapidity with which innovations are made in the art; (5) the sophistication of the technology in the art; and (6) the educational level of active workers in the field.

15. My opinion of the level of ordinary skill in the art with regard to the '056 patent is instructed by my prior experience working and teaching in the areas of Operating Systems and Computer Networks and my knowledge of colleagues and others working in that general field as of and for many years prior to the 2002/2003 time frame

16. Taking the above factors into account, in my opinion a person of ordinary skill in the art would be represented by a person with a computer science, electrical engineering, or computer engineering degree and two or more years of professional experience designing and implementing computer networks and/or computer network software. I exceeded that level of skill in the relevant time frame. In addition to being (at least) a POSITA at the time of the invention, as an engineering professor, I taught hundreds of students from 1995–2013 who would meet these qualifications.

IV. Legal Standards

17. I have been instructed by counsel that claim construction is for the Court to decide as a matter of law. Claim terms should be given their ordinary and customary meaning within the context of the patent in which the terms are used, *i.e.*, the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention in light of what the patent teaches.

18. I understand that, in construing a claim term, one looks primarily to the intrinsic patent evidence. I understand that extrinsic evidence may also be useful in interpreting patent claims when the intrinsic evidence itself is insufficient.

19. I understand that the usual and customary meaning of a claim term can be altered by the patent applicant if they choose to act as their own “lexicographer” and clearly set forth in the patent a different meaning for a claim term.

20. I understand that the meaning of a claim term can also be altered during the patent examination process by statements the patent applicant makes about the meaning or scope of the term, and that such statements are recorded in the prosecution history of the application.

21. I understand that if a claim term is ambiguous or unclear, the term must be construed to determine how a person of ordinary skill in the art would have resolved the ambiguity in light of the rest of the patent specification, patent claims, and the application’s prosecution history.

22. I understand that a claim is indefinite if it, having been read in light of the intrinsic evidence, it does not inform one of skill in the art at the time of the invention about the scope of the invention with reasonable certainty.

V. Materials Considered

23. I have considered the following materials in preparing the opinions set forth in this declaration:

- (a) the ’056 patent, including the specifications and claims;
- (b) the prosecution history of the ’056 patent in the United States Patent & Trademark Office (“the PTO”); and
- (c) the extrinsic evidence identified by the parties in their February 19, 2021 disclosures.

24. I also relied on my own training, knowledge, and experience in fields to which the asserted patents are directed, along with my understanding of how one of ordinary skill in the art would have understood the disclosure of the asserted patents.

VI. The '056 Patent

25. I have reviewed the '056 patent and its prosecution history. I understand that the '056 patent pertains to a technique for managing traffic in a multiport network node that is connected to another network node by a tunnel, for example, a stacked virtual local area network (VLAN) tunnel or a multiprotocol label switching (MPLS) tunnel. The inventions of the '056 patent enable flexible deployment of VLANs across service provider networks that utilize tunnelling techniques, such as MPLS.

26. I have been asked to opine on whether the term “dynamically determined” as used in claims 1, 18, and 21 of the '056 patent is indefinite. I am very surprised that HPE would claim that “dynamically determined” is indefinite since its meaning is abundantly clear to a person of ordinary skill in the art and is used consistently with that understanding in both the claims and specification of the '056 patent.

27. The way the claims use the term “dynamically determined” shows that it is used in its ordinary fashion in the industry. The term only occurs in the clause “wherein the LSP that corresponds to the MPLS tunnel is dynamically determined by a label distribution protocol,” making clear that it is specifically “the LSP that corresponds to the MPLS tunnel” that is dynamically determined. The rest of the limitation provides the antecedent basis for “MPLS tunnel” and provides some further context concerning the tunnel’s nature:

wherein establishing said logical port includes binding said logical port to a multi-protocol label switched (MPLS) tunnel and a destination IP address and wherein the dynamic MPLS tunnel is an MPLS tunnel that does not specify a particular label switch path (LSP) that is to be used to reach a target destination and wherein

the LSP that corresponds to the MPLS tunnel is dynamically determined by a label distribution protocol (LDP);

'056 patent at claim 1, claim 18, claim 21.

28. In particular, “the dynamic MPLS tunnel is an MPLS tunnel that does not specify a particular label switch path (LSP) that is to be used to reach a target destination” is essentially a definition of a dynamic MPLS tunnel. This definition is consistent with the ordinary industry use of the term “dynamic.” Based on it, a POSITA would understand that an LSP would be needed to transport data across the tunnel because that is a basic aspect of MPLS. A POSITA would further understand that since the tunnel does not specify an LSP, one would need to be determined dynamically when needed. Even just based on the claims “dynamically determined” is clearly not indefinite.

29. The specification further confirms that the '056 patent uses the term “dynamic” according to its ordinary industry usage, which a POSITA would be familiar with and understand. Dynamic MPLS tunnels are one of two embodiments of MPLS tunnels (the other being static MPLS tunnels) disclosed by the patent, beginning in the Abstract:

In one embodiment, the logical port is bound to a static MPLS tunnel and in another embodiment, the logical port is bound to a dynamic MPLS tunnel and the destination IP address of the destination service provider edge device.

'056 patent at 3:29–33. Here “static” means fixed/predetermined and “dynamic” means NOT fixed/predetermined. These designations actually refer to the LSPs used for the tunnel, which for static tunnels are fixed and predetermined and for dynamic tunnels must be found using an LDP as disclosed. This use of static and dynamic is consistent with general industry usage and with standard English.

30. Dynamic MPLS tunnels are discussed throughout the Figures and Specification, but the main disclosure begins at 9:7–12:

MPLS tunneling can also be implemented using dynamic MPLS tunnels. Dynamic MPLS tunnels are MPLS tunnels that do not specify a particular LSP that must be used to reach the target destination. Using a dynamic MPLS tunnel, the particular LSP that is utilized may change from time to time in response to factors such as traffic load and latency. FIG. 10 depicts an example of a dynamic MPLS tunnel 1008 (identified as MPLS tunnel 700) that connects physical port P3 of SPEDA 1002 to physical port P4 of SPED B 1004.

Further key disclosures are as follows:

. . . LSPs can be established by network operators for a variety of purposes, such as to guarantee a certain level of performance, to route around network congestion, or to create tunnels for virtual private networks. . . .

'056 patent, at 7:14–17;

. . . In operation, the MPLS tunnel ID is used to identify the actual LSP on which a packet travels. Likewise, the LSP on which the packet travels may be mapped to a physical port of the SPED (which acts as the ingress label edge router). The actual LSP that corresponds to the MPLS tunnel is dynamically determined by an LDP. . . .

'056 patent at 9:27–32; and

The primary and secondary control modules 1506 and 1508 support various functions, such as network management functions and protocol implementation functions. Example network management functions that are performed by the control modules include implementing configuration commands, providing timing control, programming hardware tables, providing system information, supporting a user interface, managing hardware changes, bus management, managing logical ports, managing VLANs, and protocol processing. . . .

'056 patent at 11:63–12:4.

31. These disclosures provide support for the language of the claims and provide further context that would inform a POSITA that “dynamically determined” is used according to its ordinary industry usage and that the way “the LSP that corresponds to the MPLS tunnel is dynamically determined by a label distribution protocol (LDP)” according to the invention of the

'056 patent is well-defined and indeed is part of the mechanism of dynamic MPLS tunnels. *See, e.g.,* '056 patent at 7:43–47 (incorporating by reference two IETF documents describing encapsulation methods and transport of layer 2 frames over IP and MPLS).

32. Based on my independent review of the '056 patent, its prosecution history, and the other materials referenced in this declaration, along with my own experience and expertise. I disagree that the term “dynamically determined” is indefinite as proposed by HPE. I also understand that, after I submit my declaration, HPE will submit a paper further explaining its positions on the meaning of the disputed claim terms. I also understand that, after I submit my declaration, HPE may submit declarations of their own expert concerning the meaning of the disputed claim terms. I therefore reserve my right to take into account and to address HPE's and its expert's positions at that time.

33. I reserve the right to supplement or amend my opinions in response to opinions expressed or positions taken by HPE's experts, or in light of any additional evidence, testimony, discovery, or other information that may be provided to me after the date of this declaration. In addition, I reserve the right to consider and testify about issues that may be raised by HPE's fact witnesses and experts at any hearing or in any expert reports. I also reserve the right to modify or to supplement my opinions as a result of ongoing fact and expert discovery or testimony at trial.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on March 1, 2021,

Scott M. Nettles Ph.D.

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